

What is claimed is:

1. A plating method for a printed circuit board comprising:

a first step of providing a substrate having a plurality of connection pads  
5 and circuit patterns connected to the connection pads;

a second step of using some of the circuit patterns provided on a surface  
of the substrate as a power connection portion and connecting the power  
connection portion to an external power source;

a third step of covering a surface of the substrate excepting the  
10 connection pads with a plating resistance resist to shield it;

a fourth step of supplying power to the connection pad through the power  
connection portion and forming a gold-plated layer on the connection pad; and

a fifth step of making the power connection portion and the external power  
source to be electrically short.

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2. The method of claim 1, wherein the second step comprises:

coating a photoresist at the surface of the substrate;

removing a portion of the photoresist to expose the connection pad and  
exposing some of the circuit patterns to form a power connection portion; and

20 coating an electrolyte layer on the surface of the substrate for connecting  
between the power connection portion and an external power source.

3. The method of claim 2, wherein the power connection portion is

formed by removing a photoresist from a portion of the circuit pattern, and

25 receives power by being connected to the electrolyte layer.

4. The method of claim 2, wherein the electrolyte layer is formed through an electroless plating method

5 5. The method of claim 2, wherein the electrolyte layer has a thickness of 0.3~0.7 $\mu$ m.

6. The method of claim 2, wherein the electrolyte layer is formed to have a desired thickness by additionally performing an electrolytic plating method  
10 on the formed electrolyte layer.

7. The method of claim 2, wherein, in the third step, the plating resistance resist is coated on the surface of the substrate formed the electrolyte layer.

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8. The method of claim 2, wherein the fifth step comprises:  
removing the electrolyte layer and the plating resistance resist; and  
coating a photoresist on the surface of the electrolyte layer and the plating  
resistance resist-removed substrate to cover the power connection portion to  
20 make power short.

9. A plating method for a printed circuit board comprising:  
a first step of providing a substrate having a plurality of bonding pads and  
ball pads at both sides thereof and a circuit pattern to which the bonding pads and  
25 the ball pads are connected;

a second step of using some of the circuit patterns provided at the surface of the substrate as first and second power connection portions and connecting the first power connection portion to an external power source;

5 a third step of covering the surface of the substrate with the ball pad formed thereon with a plating resistance resist to shield it;

a fourth step of supplying power to the bonding pad through the first power connection portion for forming a gold-plated layer on the bonding pad;

a fifth step of making the first power connection portion and the external power source to be electrically short;

10 a sixth step of connecting the second power connection portion to the external power source and coating a plating resistance resist at the surface of the substrate with the bonding pad formed thereon to shield it;

a seventh step of supplying power to the ball pad through the second power connection portion for forming a gold-plated layer on the ball pad; and

15 an eighth step of making the second power connection portion and the external power source to be electrically short.

10. The method of claim 9, wherein the second step comprises:

coating a photoresist on both surfaces of the substrate;

20 removing a portion of the photoresist to expose the bonding pad and the ball pad and exposing some of the circuit patterns to form first and second connection portion; and

coating an electrolyte layer on the surface of the substrate where the ball pad is formed in order to connect the first power connection portion to an external  
25 power source.

11. The method of claim 10, wherein the first and second power connection portion is formed by removing a photoresist from a portion of the circuit pattern, and receives power by being connected to the electrolyte layer.

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12. The method of claim 10, wherein the electrolyte layer is formed through an electroless plating method

13. The method of claim 10, wherein the electrolyte layer has a  
10 thickness of 0.3~0.7 $\mu$ m.

14. The method of claim 10, wherein the electrolyte layer is formed to have a desired thickness by additionally performing an electrolytic plating method on the formed electrolyte layer.

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15. The method of claim 10, wherein, in the third step, the plating resistance resist is coated on the surface of the substrate with the electrolyte layer formed thereon.

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16. The method of claim 10, wherein the fifth step comprises:  
removing the electrolyte layer and the plating resistance resist; and  
coating a photoresist at the surface of the electrolyte layer and the plating resistance resist-removed substrate to cover the first power connection portion to make power short.

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17. The method of claim 9, wherein the sixth step comprises:

forming an electrolyte layer at the surface of the substrate where the bonding pad is formed to electrically connect it to the second power connection portion; and

5 coating a plating resistance resist on a surface of the electrolyte layer.

18. The method of claim 10, wherein the eighth step comprises:

removing the plating resistance resist and the electrolyte layer; and

covering the second power connection portion with a photoresist to make  
10 the second power connection to be short electrically.